# TRANSMITTAL LETTER TO THE UNITED STATES RELIVING OFFICE

Date 17 August 2004
International Appl n No. AWAITED
Attorney Docket No. 2003B092

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1	Certification under 37 CFR 1.10 (if applicable)							17 August 2004	
	Express Mail mailing number					Date of Deposit			
		hereby certify that the application/correspondence attached hereto is being deposited with the United States Postal Service							
	"Express Mail Post Office to Addressee" serv PCT, Commissioner for Patents, P.O. Box 145			ffice to Addressee" ser	vice under 37 CFR 1.	.10 on the d:	ate indicated	l above and is a	ddressed to Mail Stop
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		<u> </u>				Тур	ed or printed r	name of person ma	ailing correspondence
11.	$\boxtimes$	New I	nternationa	l Application	<del></del>				
	TIT	LE						Ear	liest priority date ay/Month/Year)
			mproved Cat	talyst Recovery System				<del>                                   </del>	<u> </u>
	L								September 2003
		applic	ation for nur	SCLOSURE INFORM poses of determining whe following information	nether a license for for	eign transmi	ttal should a	nd could be grar	rnational nted and for
	A.		The invent	tion disclosed was not m	nade in the United Stat	tes.			
	В.		There is no	o prior U.S. application	relating to this inventi	on.			
	C.	$\Box$	The follow	ving prior U.S. application	on(s) contain subject r	natter which	is related to	the invention di	sclosed in the attached
		<b>-</b>	internation	nal application. (NOTE: and this listing does not	priority to these app	lications ma	y or may not	be claimed on f	form PCT/RO/101
		applica	ition no.	60/499,764		filed on	03 Septe	mber 2003	
		applica	ition no.			filed on			
			and D	OOES NOT ALTER hich would require the under 35 U.S.C. 181 and	MIGHT BE CONS	SIDERED 7 ve been made	O ALTER	the general natu	ont the sperificate re of the invention in a the appropriate defense
III.		A Da	enonce to a	n Invitation from the R	O/US. The following	document(s	s) is (are) end	:losed:	
111.	<u>,</u>		-	est for An Extension of			, (,		:
	A.					<i>:</i>			· · ·
	В.			er of Attorney (General o	n Regular)				
	c.	Ц	Replace	ement pages:			·		
	·		pages		of the request (PCT/F	RO/101)	pages		of the figures
			pages		of the description		pages		of the abstract
			pages	<u> </u>	of the claims				
	D.		Submissi	ion of Priority Documen	ts				
		1	Priority docu	ment		Prior	rity document		
	E.		Fees as s	specified on attached Fee	Calculation sheet for	m PCT/RO/	101 annex		
Г	v. 🗀	AR	equest for F	Rectification under PC	Г91 🗌 А	Petition		A Sequence	Listing Diskette
V	. [	Oth	er (please sp	pecify):					
		F	Applica	ant			Louis N.	Moreno	
	perso	L * _	<u> </u>	ey/Agent (Reg. No.)			Typed nam		
	Attorney/Agent (Reg. No.)  Attorney/Agent (Reg. No.)  44,953			00 Representative	Louis n. Morene Simologe				

## PCT

### **REQUEST**

For receiving Office u	ise only————
International Application No.	
International Filing Date	
N. C.	·
Name of receiving Office and "PCT Inte	rnational Application"

The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty. Applicant's or agent's file reference (if desired) (12 characters maximum) 2003B092 TITLE OF INVENTION Box No. 1 Improved Catalyst Recovery System This person is also inventor Box No. II APPLICANT Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.) Telephone No. 281-834-5675 Facsimile No. ExxonMobil Chemical Patents Inc. 281-834-2495 A Corporation of the State of Delaware 5200 Bayway Drive Teleprinter No. Baytown, Texas 77520-5200 United States of America N/A Applicant's registration No. with the Office State (that is, country) of residence: State (that is, country) of nationality: US US all designated States except the United States the States indicated in all designated This person is applicant the Supplemental Box the United States of America of America only States for the purposes of: FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S) Box No. 111 Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.) This person is: applicant only 'ANG, Norman 2 Normandy Drive applicant and inventor Westfield, New Jersey 07090 inventor only (If this check-box is marked, do not fill in below.) United States of America Applicant's registration No. with the Office State (that is, country) of residence: State (that is, country) of nationality: US the United States the States indicated in all designated States except This person is applicant all designated the Supplemental Box for the purposes of: States the United States of America of America only Further applicants and/or (further) inventors are indicated on a continuation sheet. AGENT OR COMMON REPRESENTATIVE; OR ADDRESS FOR CORRESPONDENCE Box No. IV common The person identified below is hereby/has been appointed to act on behalf of agent representative the applicant(s) before the competent International Authorities as: Name and address: (Family name followed by given name; for a legal entity, full official designation. Telephone No. The address must include postal code and name of country.) 281-834-5675 MORENO, Louis N. Facsimile No. **ExxonMobil Chemical Company** 281-834-2495 Law Technology P. O. Box 2149 Teleprinter No. Baytown, Texas 77522-2149 N/A United States of America Agent's registration No. with the Office 44,953 Address for correspondence: Mark this check-box where no agent or common representative is/has been appointed and the space above is used instead to indicate a special address to which correspondence should be sent.

Sheet	NΙα		2		
Sheer	180).	 		_	

Continuation of Box No. III FURTHER APPLICANT(S) AND/OR	(FURTHER) INVENTOR(S)
If none of the following sub-boxes is used, this sheet should not be include	led in the request.
Name and address: (Family name followed by given name; for a legal entity, full official The address must include postal code and name of country. The country of the address in Box is the applicant's State (that is, country) of residence if no State of residence is indicated to TIRMIZI, Shakeel 76 Idolstone Lane Matawan, New Jersey 07747 United States of America	dicated in this
us	at is, country) of residence:
This person is all designated all designated States excapplicant States United States of America	the United States of America only the States indicated in the Supplemental
Name and address: (Family name followed by given name; for a legal entity, full official The address must include postal code and name of country. The country of the address in Box is the applicant's State (that is, country) of residence if no State of residence is indicated the applicant of the address in the a	ndicated in this
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This person is all designated all designated States exapplicant for the States	tcept the  the United States the States indicated in the Supplemental
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Name and address: (Family name followed by given name; for a legal entity, full office. The address must include postal code and name of country. The country of the address Box is the applicant's State (that is, country) of residence if no State of residence is indicate.	indicated in this
State (that is, country) of nationality:  State	(that is, country) of residence:
This person is all designated all designated States applicant for the States United States of Ame	
Further applicants and/or (further) inventors are indicated on an	nother continuation sheet.

#### Supplemental Box If the Supplemental Box is not used, this sheet should not be included in the request.

- If, in any of the Boxes, except Boxes Nos VIII(i) to (v) for which a special continuation box is provided, the space is insufficient to furnish all the information: in such case, write "Continuation of Box No..." (indicate the number of the Box) and furnish the information in the same manner as required according to the captions of the Box in which the space was insufficient, in particular:
- (i) if more than two persons are to be indicated as applicants and/or inventors and no "continuation sheet" is available: in such case, write "Continuation of Box No. III" and indicate for each additional person the same type of information as required in Box No. III. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below;
- (ii) if, in Box No. II or in any of the sub-boxes of Box No. III, the indication "the States indicated in the Supplemental Box" is checked: in such case, write "Continuation of Box No. II" or "Continuation of Boxes No. III" or "Continuation of Boxes No. II and No. III" (as the case may be), indicate the name of the applicant(s) involved and, next to (each) such name, the State(s) (and/or, where applicable, ARIPO, Eurasian, European or OAPI patent) for the purposes of which the named person is applicant;
- (iii) if, in Box No. II or in any of the sub-boxes of Box No. III, the inventor or the inventor/applicant is not inventor for the purposes of all designated States or for the purposes of the United States of America: in such case, write "Continuation of Box No. III" or "Continuation of Box No. III" or "Continuation of Boxes No. II and No. III" (as the case may be), indicate the name of the inventor(s) and, next to (each) such name, the State(s) (and/or, where applicable, ARIPO, Eurasian, European or OAPI patent) for the purposes of which the named person is inventor;
- (iv) if, in addition to the agent(s) indicated in Box No. IV, there are further agents: in such case, write "Continuation of Box No. IV" and indicate for each further agent the same type of information as required in Box No. IV;
- if, in Box No. VI, there are more than three earlier (v) applications whose priority is claimed: in such case, write "Continuation of Box No. VI" and indicate for each additional earlier application the same type of information as required in Box VI
- If the applicant intends to make an indication of the wish that the international application be treated, in certain designated States, as an application for a patent of addition, certificate of addition, inventor's certificate of addition or utility certificate of addition: in such a case, write the name or two-letter code of each designated State concerned and the indication "patent of addition," "certificate of addition," "inventor's certificate of addition," the number of the parent application or parent patent or other patent grant and the date of grant of the parent patent or other patent grant or the date of filing of parent application (Rules 4.11(a)(iii) and 49bis.1(a) or (b)).
- If the applicant intends to make an indication of the wish that the international application be treated, in the United States of America, as a continuation or continuation-in-part of an earlier application: in such a case, write "United States of America" or "US" and the indication "continuation" or "continuation-in-part" and the number and the filing date of the parent application (Rules 4.11(a)(iv) and 49.bis.1(d)).

#### Continuation of Box IV:

ARECHEDERRA, Leandro; BELL, Catherine L.; BELL, Keith A.; FICK, C. Milton; GRIFFIS, Andrew B.; JAMES, Rick F.; KELLER, Bradley A.; KUBENA, Linda A.; LAVOIE, Paul T.; LOMAS, Lucinda; MILBANK, Mandi B.; MORENO, Louis N.; PRUITT, Tom F.; REID, Frank E.; SANTINI, Dennis P.; SCHMIDT, C. Paige; SHER, Jaimes; SHERER, Edward F.; TYUS, Darryl M.; WALSH, Maria C.; WOO, Philip G.

All Having Offices at: 5200 Bayway Drive Baytown, Texas 77520 United States of America

Mailing Address: ExxonMobil Chemical Company P. O. Box 2149 Baytown, Texas 77522-2149 United States of America

CROMWELL, Michael A.; DEW, Melvyn J.; MARESCHAL, Anne; VELDHUIZEN, Albert Dirk Willem

Mailing Address: ExxonMobil Chemical Europe Inc. P. O. Box 105, B-1830 Machelen, BELGIUM

Sheet	Nο		4	

Box No.V DESIGNATION	ONS			
The filing of this request co international filing date, for and national patents.	onstitutes under Rule 4.9(a the grant of every kind of p	a), the designation of all protection available and,	l Contracting States bo where applicable, for th	ound by the PCT on the le grant of both regional
However,	signated for any kind of nat	ional protection		
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_	is not designated for any ki	•	1	
(The check-boxes above ma		-		avoid the ceasing of the
offect under the notional la	w, of an earlier national ap national law provisions in	onlication from which pri	ority is claimed. See th	ne Notes to Box No. V as
Box No. VI PRIORITY C				
The priority of the followin	g earlier application(s) is he	ereby claimed:	· · · · · · · · · · · · · · · · · · ·	
Filing date	Number	W	here earlier application	is:
of earler application (day/month/year)	of earlier application	national application: country or Member	regional application:* regional Office	international application: receiving Office
item (1) 03 September 2003 (03.09.2003)	60/499,764	US	·	
item (2)				:
item (3)	`.			
		<u> </u>		
	s are indicated in the Supple			
The receiving Office is application(s) (only if the is the receiving Office) ide	requested to prepare and earlier application was filed entified above as:	transmit to the Internal division of the transmit to the Internal division of the transmit to the transmit to the Internal division of the Interna	ational Bureau a certification of the purposes of this	fied copy of the earlier international application
	tem (1) item (	<del></del>	,	see Supplemental Box
* Where the earlier applicat Industrial Property or one M	ion is an ARIPO application, a lember of the World Trade Org	indicate at least one countr ganization for which that ea	y party to the Paris Conv wiler application was filed	vention for the Protection of I (Rule 4.10(b)(ii)):
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	ATIONAL SEARCHING			· · · · · · · · · · · · · · · · · · ·
	Searching Authority (ISA il search, indicate the Autho	(if two or more Internative chosen; the two-lette	national Searching Aut or code may be used):	horities are competent to
ISA/EP				
Request to use results of from the International Sec				Ì
Date (day/month/year) 18 March 2003		mber Co 3110454US EF	ountry <i>(or regional Offic</i> o	ce) ·
Box No. VIII DECLA	RATIONS	***************************************		
The following declaration check-boxes below and in	ons are contained in Boxes andicate in the right column t	Nos. VIII (i) to (v) (mar the number of each type of	k the applicable of declaration):	Number of declarations
Box No. VIII (i)	Declaration as to the id	lentity of the inventor		:
Box No. VIII (ii)	Declaration as to the ap filing date, to apply for	oplicant's entitlement, as and be granted a patent	at the international	: 1
Box No. VIII (iii)	Declaration as to the apfiling date, to claim the	pplicant's entitlement, as priority of the earlier ap	at the international plication	: 1
Box No. VIII (iv)	Declaration of inventor of the United States of	rship (only for the purpo: America)	ses of the designation	:
Box No. VIII (v)	Declaration as to non-p	prejudicial disclosures or	exceptions to lack of n	ovelty:

	Sheet No5				
Box No. VIII (ii) DECLARATION:	ENTITLEMENT TO APPLY	FOR AND BE GRANTED A PATENT			
The declaration must conform to the standardized wording provided for in Section 212; see Notes to Boxes Nos. VIII, VIII (i) to (v) (in general) and the specific Notes to Box No. VIII (ii). If this Box is not used, this sheet should not be included in the request.					
Declaration as to the applicant's entitlemen 4.17(ii) and 51bis.1(a)(ii)), in a case where	t, as at the international filing date the declaration under Rule 4.17(i	e, to apply for and be granted a patent (Rules iv) is not appropriate:			
In relation to this International Applicat	ion,				
EXXONMOBIL CHEMICAL PATENTS	INC., entitled to apply for and	be granted a patent by virtue of the following:			
an assignment from YANG, Norman to	EXXONMOBIL CHEMICAL F	PATENTS INC., dated 02 December 2003,			
an assignment from TIRMIZI, Shakeel	to EXXONMOBIL CHEMICAL	L PATENTS INC., dated 02 December 2003.			
This declaration is made for the pur America.	poses of all designations, ex	cept the designation of the United States of			
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☐ This declaration is continued on the following sheet, "Continuation of Box No. VIII (ii)".

Sheet No. 6

Box No. VIII (iii)	DECLARATION: ENTITLEMENT TO CLAIM PRIORITY
BOX NO. VIII (III)	DECLARATION: ENTITEEMENT TO CEARM I RIORITI

The declaration must conform to the standardized wording provided for in Section 213; see Notes to Boxes Nos. VIII, VIII (i) to (v) (in general) and the specific Notes to Box No. VIII (iii). If this Box is not used, this sheet should not be included in the request.

Declaration as to the applicant's entitlement, as at the international filing date, to claim the priority of the earlier application specified below, where the applicant is not the applicant who filed the earlier application or where the applicant's name has changed since the filing of the earlier application (Rules 4.17(iii) and 51bis.1(a)(iii)): In relation to this International Application,

EXXONMOBIL CHEMICAL PATENTS INC., is entitled to claim priority of earlier application

60/499,764

an assignment from YANG, Norman to EXXONMOBIL CHEMICAL PATENTS INC., dated 02 December 2003,

an assignment from TIRMIZI, Shakeel to EXXONMOBIL CHEMICAL PATENTS INC., dated 02 December 2003.

This declaration is made for the purposes of all designations, except the designation of the United States of America.

This declaration is continued on the following sheet, "Continuation of Box No. VIII (iii)".

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Sheet	NΛ	•

Box No. IX CHECK LIST; LANGUAGE	OF FILING	
This international application contains:  (a) in paper form, the following number of	This international application is accompanied by the following item(s) (mark the applicable check-boxes below and indicate in right column the number of each item):	Number of items
sheets: request (including declaration sheets) : 7  description (excluding sequence listing and/or tables related thereto) : 12  claims : 3  abstract : 1  drawings : 3  Sub-total number of sheets 26  sequence listing : tables related thereto : (for both, actual number of sheets if filed in paper form, whether or not also filed in computer readable form; see (c)  Total number of sheets : 26  (b)  only in computer readable form (Section 801(a)(i))  (i)  sequence listing  (ii)  tables related thereto  (c)  also in computer readable form (Section 801(a)(ii))  (i)  sequence listing  (ii)  tables related thereto  Type and number of carriers (diskette, CD-ROM, CD-R or other) on which are contained the  sequence listing:  tables related thereto:	1.	sm or  h under oplication): column) y for the  ne copy olumn isting h under ernational ed in left cable, the er Section he copy
(additional copies to be indicated under items 9(ii) and/or 10(ii), in right column)		
Figure of the drawings which should accompany the abstract:	Language of filing of the international application: English	
Box No. X SIGNATURE OF APPLICANT Next to each signature, indicate the name of the person signature.	AGENT OR COMMON REPRESENTATIVE ming and the capacity in which the person signs (if such capacity is not obvious from the capacity in which the person signs (if such capacity is not obvious from the capacity in which the person signs (if such capacity is not obvious from the capacity in which the person signs (if such capacity is not obvious from the capacity in which the person signs (if such capacity is not obvious from the capacity is not obvious from the capacity in which the person signs (if such capacity is not obvious from the capacity in which the person signs (if such capacity is not obvious from the capacity in which the person signs (if such capacity is not obvious from the capacity is not obvious from the capacity in which the person signs (if such capacity is not obvious from the capacity is not obvious from the capacity is not obvious from the capacity in which the person signs (if such capacity is not obvious from the capacity is	n reading the request).
Date of actual receipt of the purported international application:	For receiving Office use only	2. Drawings:
<ol> <li>Corrected date of actual receipt due to la timely received papers or drawings comp purported international application:</li> </ol>	ter but oleting the	
4. Date of timely receipt of the required corrections under PCT Article 11(2):		not received:
5. International Searching Authority (if two or more are competent): ISA/	6. Transmittal of search copy delayed until search fee is paid	
	— For International Bureau use only	· · ·
Date of receipt of the record copy by the International Bureau:		

Applicant's or agent's

ExxonMobil Chemical Patents Inc.

3. INTERNATIONAL FILING FEE

CALCULATION OF PRESCRIBED FEES

file reference Applicant

#### FEE CALCULATION SHEET

1. TRANSMITTAL FEE .....

2. SEARCH FEE ..... International search to be carried out by \_

(This check-box may be marked only if the conditions for deposit accounts of the receiving Office so permit) Authorization to charge any deficiency or credit any overpayment in the total fees indicated above.

Authorization to charge the total fees indicated above.

Authorization to charge the fee for priority document.

This sheet is n	ot part of and does not cour	nt as a sheet of the internation	al application.	
PCT	Γ	For re	ceiving Office use	only —
FEE CALCULA  Annex to the		International Application	on No.	· · · · · · · · · · · · · · · · · · ·
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conMobil Chemical Patents Inc.				İ
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SEARCH FEE International search to be carrie (If two or more International State international search, indicarry out the international sear	d out by <u>EP</u> Searching Authorities are co ate the name of the Authori	ompetent to carry out	1,119.00 S	
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TOTAL FEES PAYABLE Add amounts entered at T, S,		e TOTAL box	2,375.00 DTAL	
MODE OF PAYMENT				}
authorization to charge deposit account (see below)	postal money orde		coupons	
cheque	bank draft	revenue stamps	other (spec	cify):
AUTHORIZATION TO CHA	RGE (OR CREDIT) DEPO be available at all receiving	Offices) Receiving	Office:	US

Deposit Account No.:

Signature:

Date: \_\_

Form PCT/RO/101 (Annex) (January 2004) LegalStar 2004, Form PCTREQ

See Notes to the fee calculation sheet

05-1712

17 August 2004

Louis N. Moreno M. Merro



(PCT Rule 90.5)

		,
EXXONMOBIL		
	00 Bayway Drive	
	own, Texas 775	
Unite	d States of Amer	rica
hereby appoint(s) the following persons as:	agent	common representative
Name and address (Family name followed by given name; for a legal entity, full offici	ial designation. The address	must include postal code and name of country.)
ARECHEDERRA, Leandro; BELL, Cathe Rick F.; KELLER, Bradley A.; KUBEN MORENO, Louis N.; NOWAK, Kelly A.; SCHMIDT, C. Paige; SHER, Jaimes; TYU	IA, Linda A.; LO ; PRUITT, Tom F	MAS, Lucinda; MILBANK, Mandi E .; REID, Frank E.; SANTINI, Dennis F
having offices at: 5200 Bayway Drive Baytown, Texas 77520 United States of America	<del></del>	dress: P.O. Box 2149 Baytown, Texas 77522-2149 United States of America
DEW, Melvyn J.; MARESCHAL, Anne; Michael A.		
	Mailing Ac	ldress: P.O. Box 105 B-1830 Machelen Belgium
to represent the undersigned before	all the co	mpetent International Authorities
	the lntern	ational Searching Authority only
	the Intern	ational Preliminary Examining Authority only
in connection with any and all international applica	ations filed by the und	ersigned with the following Office
United States of America	as receiving Office	and to make or receive payments on behalf of th
undersignec'.		
Signature(s) (where there are several persons, each of the capacity in which the person signs, if such capacity is	hem must sign; next to ea is not obvious from readin	ich signature, indicate the name of the person signing a ng this power):
	X	
Andrew B	B. Griffis, Assista	int Secretary PATENTS INC.
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